

In Response To:

López-Blanco R, Benito-León J, Hernández-Gallego J & Sánchez-Ferro A. The validation of tremor cancelling technologies needs multidisciplinary consensus statement. Tremor Other Hyperkinet Mov. 2020; 10. doi: 10.7916/tohm.v0.765

Original Article:

Castrillo-Fraile V, Peña EC, Gabriel y Galán JMT, Delgado-López PD, Collazo C & Cubo E. Tremor control devices for essential tremor: a systematic literature review. Tremor Other Hyperkinet Mov. 2019; 9. doi: 10.7916/tohm.v0.688

Letters

Author Response to Letter to the Editor

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Dear Editor:

We deeply appreciate the comments provided by López-Blanco et al. regarding our recent publication entitled “Tremor Control Devices for Essential Tremor: A Systematic Literature Review.”¹

We basically agree with the aspects highlighted by these authors; however, we would like to discuss them briefly.

First, the main objective of our systematic literature review was to conduct a literature search about tremor-control devices using standardized criteria regarding efficacy and comfort in patients diagnosed with essential tremor (ET). We did not include computer software/hardware to control kinetic tremor by using the mouse of a PC, because the scientific literature supporting this technology have included patients with multiple sclerosis exclusively.^{2,3} We also excluded websites that did not include peer-review literature supporting effectiveness.³

Second, we fully agree with their second statement regarding the lack of publications of negative studies, and independent testing outside the initial developers. It would be interesting to study whether publication bias is more prevalent among nonpharmacologic interventions as compared to drugs in tremor and other neurological related fields.⁴

Third, we also agree on the importance of duration of clinical trials aimed to analyze the inherent variability of tremor intensity during testing. In order to study the effectiveness of tremor-suppression devices in ET, the functional impairment should ideally be studied at home, or at least, in a friendly environment, either in a natural/casual setting or under carefully-controlled circumstances in the lab, for a certain amount of time, to reduce tremor fluctuations due to confusing factors (pharmacological treatment effects, anxiety, etc.).

We appreciate the above comments provided by López-Blanco et al. which definitively improve the discussion of our article and highlight the importance of well-designed pharmacological and nonpharmacological clinical trials in ET.

References

1. Castrillo-Fraile V, Peña EC, Gabriel Y Galán JMT, Delgado-López PD, Collazo C, Cubo E. Tremor control devices for essential tremor: a systematic literature review. *Tremor Other Hyperkinet Mov* 2019;9:1–6.
2. Rocon E, Miranda JA, Pons JL. TechFilter: filtering undesired tremorous movements from PC mouse cursor. *Technol Disabil* 2006;18(1):3–8. doi: 10.3233/TAD-2006-18101
3. SteadyMouse LLC. The Steady Mouse Project [Internet]. 2019. Available from: <https://www.steadymouse.com/> [cited 28 Dec 2019]
4. Petty S, Gross RA. Neurology® null hypothesis: a special supplement for negative, inconclusive, or confirmatory studies. *Neurology* 2018;91(1):12–13. doi: 10.1212/WNL.0000000000005803